# METRICS INDEXING AND STORAGE SERVICE

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# Motivation

- Solution to organize archiving, retrieval and aid the display of type agnostic middleware generated events.
  - For CMS, Run II, FermiGrid and all VOs using FermiGrid.
- Organize data warehousing across the borders of isolated software systems
  - New use cases in areas of troubleshooting and metric analysis.
- New activity that may overlap with features of existing project s
  - In areas of monitoring, data warehousing or data mining.
- Input from DZero and REX is critical to success of this activity

# Goals

- Make the available data more portable
  - Data can used in different reporting contexts
- Make the metrics persistent in time
  - Various "lessons learned" documents
- Ease the process of creating new data metrics
  - Creating new metrics will be cost effective
  - Allow creation of multiple metrics quickly
- Unify the presentation layer
  - Interpret different data sources
  - Present the information to different users in a customizable view

# What we want to achieve today?

- We want to understand -

  - Monitoring tools and technologies currently in use by REX?

  - Data metrics currently in use and data metrics that will be used in future?
    - Number of files produced …?
    - CAB utilization plots …?
    - Data metric in future …?

  - Can we unify different Data Metrics? How?

  - Users adapting to a common service like this?

# Details about Data Metrics

- Data collection
  - Rate of data collection (hourly, daily, weekly … ?)
  - Tools of data collection (cron … ?)
- Data Storing
  - Databases, Log files …?
- Data Rendering
  - Ganglia, RRD, root, custom plots …?
- Data Presentation
  - Mail, web, snail mail …?
  - Static v/s dynamic presentation service.
  - Is data portable?